

## REMARKS

In the Office Action mailed June 11, 2007, the Examiner took the following action: (1) rejected claims 1-77 on grounds of nonstatutory obviousness-type double patenting; (2) objected to claims 1-54 due to informalities; (3) rejected claims 1-10, 16-18, 20-28, 34-45, and 51-53 under 35 U.S.C. §102(b) as being anticipated by Borland (US 6343217); (4) rejected claims 11-15, 29-33, and 46-50 under 35 U.S.C. §103(a) as being unpatentable over Borland in view of Tedenstig (US 6307859); (5) rejected claims 55-68 and 74-76 under 35 U.S.C. §103(a) as being unpatentable over Borland in view of White, III (US 6561454); and (6) rejected claims 69-73 and 77 under 35 U.S.C. §103(a) as being unpatentable over Borland and White, III in further view of Tedenstig. Applicant respectfully requests reconsideration of the application in view of the foregoing amendments and the following remarks.

### *I. Double Patenting Rejection*

Claims 1-77 are provisionally rejected on grounds of non-statutory obviousness-type double patenting over claims 1-55 of co-pending Application Serial No. 10/930,973. Applicant submits concurrently herewith a terminal disclaimer of the subject application in view of Application Serial No. 10/930,973, and therefore respectfully requests reconsideration and withdrawal of this rejection.

### *II. Objections to Claims 1-54*

The Examiner objected to claims 1-54 due to informalities. Applicants have amended claims 1, 20, and 34 to correct the informalities noted by the Examiner, and therefore request reconsideration and withdrawal of the objection to the claims.

*III. Rejections under 35 USC §102(b) and 35 USC §103(a)*

Claims 1-19

As amended claim 1 recites:

1. A system for interfacing with at least one node in a Fibre Channel network, the system comprising:
  - an input interface couplable to receive a plurality of frames of data, the frames of data being at least one of transmitted and received at the at least one node in the Fibre Channel network; and
  - an output interface couplable to provide the received frames of data to a device, *wherein at least one of the input interface and the output interface is further configured to time tag the received plurality of frames of data prior to the providing of the frames of data to the device.* (emphasis added).

Borland (US 6343217)

Borland teaches a digital cordless telephone system. According to Borland, the system includes two separate units: a handset and a base unit wherein they generally communicate through optical signals or fiber (3:34-38). Borland asserts that a pulse code modulation (PCM) scheme provides for low-cost implementation and excellent voice quality with acceptable range (2:4-8). Thus, Borland is concerned with optimizing cost of implementation with audible signal integrity in a telephony context.

Applicant respectfully submits that Borland fails to disclose, teach, or fairly suggest the system recited in claim 1. Specifically, Borland fails to teach or suggest a system that includes, in relevant part, an input interface and an output interface *wherein at least one of the input interface and the output interface is further configured to time tag the received plurality of frames of data prior to the providing of the frames of data to the device.* Borland is silent to the above-noted limitations. Therefore, claim 1 is allowable over Borland.

Tedenstig (US 6307859)

Tedenstig teaches a device for telecommunication networks. According to Tedenstig, the device has high-speed links where message streams are transferred. The device receives and transfers messages from node to node given the presuming addresses wherein empty messages are fetched from the nodes when found (5:41-48).

Applicant respectfully submits that Tedenstig fails to remedy the above-noted deficiencies of Borland. Specifically, Tedenstig fails to teach or suggest a system that includes, in relevant part, an input interface and an output interface *wherein at least one of the input interface and the output interface is further configured to time tag the received plurality of frames of data prior to the providing of the frames of data to the device*. Tedenstig is silent to the above-noted limitations. Therefore, claim 1 is allowable over Tedenstig, either singly or in combination with Borland.

White (US 6561454)

White teaches a data network including network devices and transmission lines that may be installed within an aircraft. (Abstract). Specifically, White teaches a network system including a network hub that is the common connection point for all of a plurality of network devices (Fig. 2; 2:51-67). More generally, White is concerned with a readily maintainable and reconfigurable network architecture (3:25-40).

Applicant respectfully submits that White fails to remedy the above-noted deficiencies of Borland and Tedenstig. Specifically, White fails to teach or suggest a system that includes, in relevant part, an input interface and an output interface *wherein at least one of the input interface and the output interface is further configured to time tag the received plurality of frames of data prior to the providing of the frames of data to the device*. White is silent to the above-noted

limitations. Therefore, claim 1 is allowable over White, either singly or in combination with Borland Tedenstig.

For the foregoing reasons, claim 1 is allowable over the Cited References (Borland, Tedenstig, and White). Claims 2-19 depend from claim 1 and are allowable at least due to their dependencies on claim 1, and also due to additional limitations recited in those claims. For example, claim 3 recites the system of Claim 1, wherein the output interface is coupled to the input interface and configured to receive the plurality of frames of data from the input interface, *the output interface being configured to perform a low fill function such that, in a normal mode of operation, when fibre channel data is unavailable the low fill function maintains a transmission rate of the plurality of frames transmitted from the output interface.* Similarly, claim 4 recites the system of Claim 3, wherein *the output interface is further configured such that in a low fill mode of operation, when fibre channel data is unavailable, the low fill function adds a key word to a frame wherein the transmission rate of the frame decreases to a predetermined address.* These additional limitations are also not taught or suggested by the Cited References.

### Claims 20-33

As amended claim 20 recites:

20. A system for interfacing with at least one node in a Fibre Channel network, the system comprising:
  - an input interface couplable to receive a plurality of frames of data, the frames of data being at least one of transmitted and received at the at least one node in the Fibre Channel network;
  - an output interface couplable to provide the received frames of data in pulse code modulation (PCM) formatted frames to a device, *wherein at least one of the input interface and the output interface is further configured to time tag the received plurality of frames of data prior to the providing of the frames of data to the device;* and
  - a processor coupled to control the input interface and the output interface.

(emphasis added).

As described more fully above, Applicant respectfully submits that the Cited References fail to disclose, teach, or fairly suggest the system recited in claim 20. Specifically, the Cited References fail to teach or suggest a system that includes, in relevant part, an input interface and an output interface *wherein at least one of the input interface and the output interface is further configured to time tag the received plurality of frames of data prior to the providing of the frames of data to the device*. The Cited References are silent as to the above-noted limitations. Therefore, claim 20 is allowable over the Cited References (Borland, Tedenstig, and White).

Claims 21-33 depend from claim 20 and are allowable at least due to their dependencies on claim 20, and also due to additional limitations recited in those claims. For example, claim 22 recites the system of Claim 20, wherein the output interface is coupled to the input interface and configured to receive the plurality of frames of data from the input interface, *the output interface being configured to perform a low fill function such that, in a normal mode of operation, when fibre channel data is unavailable the low fill function maintains a transmission rate of the plurality of frames transmitted from the output interface*. Similarly, claim 23 recites the system of Claim 22, wherein *the output interface is further configured such that in a low fill mode of operation, when fibre channel data is unavailable, the low fill function adds a key word to a frame wherein the transmission rate of the frame decreases to a predetermined address*. These additional limitations are also not taught or suggested by the Cited References.

#### Claims 34-54

As amended claim 34 recites:

34. A Fibre Channel network comprising:
  - a first port configured to at least one of transmit and receive a plurality of frames of data;
  - a second port configured to transmit a plurality of frames of data;
  - a third port configured to at least one of transmit and receive a plurality of frames of data;
  - a fourth port configured to transmit a plurality of frames of data;

a first network device having a first node coupled to the first port;  
at least one second network device having a second node coupled to the third port;  
and  
a system operatively coupled to and configured to interface with the first and  
second nodes, the system including:  
an input interface couplable to receive a plurality of frames of data, the  
plurality frames of data being at least one of transmitted and received at  
the at least one node in the Fibre Channel network; and  
an output interface couplable to provide the received frames of data to a  
device, *wherein at least one of the input interface and the output interface* is further configured to time tag the received plurality of frames of data  
*prior to the providing of the frames of data to the device.* (emphasis  
added).

As described more fully above, Applicant respectfully submits that the Cited References fail to disclose, teach, or fairly suggest the network recited in claim 34. Specifically, the Cited References fail to teach or suggest a network having a system that includes, in relevant part, an input interface and an output interface *wherein at least one of the input interface and the output interface is further configured to time tag the received plurality of frames of data prior to the providing of the frames of data to the device.* The Cited References are silent as to the above-noted limitations. Therefore, claim 34 is allowable over the Cited References (Borland, Tedenstig, and White).

Claims 35-54 depend from claim 34 and are allowable at least due to their dependencies on claim 34, and also due to additional limitations recited in those claims. For example, claim 38 recites the network of Claim 34, wherein the output interface is coupled to the input interface and configured to receive the plurality of frames of data from the input interface, *the output interface being configured to perform a low fill function such that, in a normal mode of operation, when fibre channel data is unavailable the low fill function maintains a transmission rate of the plurality of frames transmitted from the output interface.* Similarly, claim 39 recites the network of Claim 34, wherein *the output interface is further configured such that in a low fill mode of operation, when fibre channel data is unavailable, the low fill function adds a key word to a frame wherein the transmission rate of the frame decreases to a predetermined address.* These

additional limitations are also not taught or suggested by the Cited References.

Claims 55-77

As amended claim 55 recites:

55. An aircraft comprising:  
a fuselage;  
at least one engine;  
lift generating surfaces; and  
a plurality of avionics units networked with a Fibre Channel network, the network  
including:  
a first port configured to at least one of transmit and receive a plurality of  
frames of data;  
a second port configured to transmit a plurality of frames of data;  
a third port configured to at least one of transmit and receive a plurality of  
frames of data;  
a fourth port configured to transmit a plurality of frames of data;  
a first network device having a first node coupled to the first port;  
at least a second network device having a second node coupled to the third  
port; and  
a system for interfacing with the first and second nodes, the system including:  
an input interface couplable to receive a plurality of frames of data, the  
plurality frames of data being at least one of transmitted and received  
at the at least one node in the Fibre Channel network; and  
an output interface couplable to provide the received frames of data to a  
device, *wherein at least one of the input interface and the output  
interface is further configured to time tag the received plurality of  
frames of data prior to the providing of the frames of data to the  
device.* (emphasis added).

As described more fully above, Applicant respectfully submits that the Cited References fail to disclose, teach, or fairly suggest the aircraft recited in claim 55. Specifically, the Cited References fail to teach or suggest an aircraft that includes a network having a system that includes, in relevant part, an input interface and an output interface *wherein at least one of the input interface and the output interface is further configured to time tag the received plurality of frames of data prior to the providing of the frames of data to the device.* The Cited References are silent as to the above-noted limitations. Therefore, claim 55 is allowable over the Cited

References (Borland, Tedenstig, and White).

Claims 56-77 depend from claim 55 and are allowable at least due to their dependencies on claim 55, and also due to additional limitations recited in those claims. For example, claim 61 recites the aircraft of Claim 55, wherein the output interface is coupled to the input interface and configured to receive the plurality of frames of data from the input interface, *the output interface being configured to perform a low fill function such that, in a normal mode of operation, when fibre channel data is unavailable the low fill function maintains a transmission rate of the plurality of frames transmitted from the output interface*. Similarly, claim 62 recites the aircraft of Claim 55, wherein *the output interface is further configured such that in a low fill mode of operation, when fibre channel data is unavailable, the low fill function adds a key word to a frame wherein the transmission rate of the frame decreases to a predetermined address*. These additional limitations are also not taught or suggested by the Cited References.

## CONCLUSION

For the foregoing reasons, Applicant respectfully submits that claims 1-77 are now in condition for allowance. If there are any remaining matters that may be handled by telephone conference, the Examiner is kindly invited to contact the undersigned attorney at the telephone number listed below.

Respectfully Submitted,

Dated: Oct. 30, 2007

By:   
Dale C. Barr  
Lee & Hayes, PLLC  
Reg. No. 40,498  
206-315-7916

Enclosure: Terminal Disclaimer

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